



026350-068.ST25

## SEQUENCE LISTING

<110> Sano, Hiroshi  
Kusano, Tomonobu  
Koizumi, Nozomu

<120> Theobromine Synthase Polypeptide of Coffee Plant and the Gene  
Encoding Said Polypeptide

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<140> US 09/971,020

<141> 2001-10-05

<150> JP 2000-307,149

<151> 2000-10-06

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<170> FastSEQ for Windows Version 4.0

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<212> PRT

<213> Coffea arabica

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Gln	Lys	Ala	Tyr	Leu	Asp	Gln	Phe	Thr	Lys	Asp	Phe	Thr	Thr	Phe	Leu
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 Glu Val Lys Cys Ile Val Glu Glu Glu Gly Ser Cys Glu Ile Leu Tyr  
 275 280 285  
 Leu Glu Thr Phe Lys Ala His Tyr Asp Ala Ala Phe Ser Ile Asp Asp  
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 Asp Tyr Pro Val Arg Ser His Glu Gln Ile Lys Ala Glu Tyr Val Ala  
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 Ser Leu Ile Arg Ser Val Tyr Glu Pro Ile Leu Ala Ser His Phe Gly  
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 Glu Ala Ile Met Pro Asp Leu Phe His Arg Leu Ala Lys His Ala Ala  
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 <213> *Coffea arabica*

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 Gly Pro Asn Thr Leu Leu Thr Val Trp Asp Thr Val Gln Ser Ile Asp  
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 Lys Val Lys Gln Glu Met Lys Asn Glu Leu Glu Arg Pro Thr Ile Gln  
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 Val Phe Leu Thr Asp Leu Phe Gln Asn Asp Phe Asn Ser Val Phe Met  
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 115 120 125  
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 180 185 190  
 Val Gln Lys Ala Tyr Leu Asp Gln Phe Thr Lys Asp Phe Thr Thr Phe  
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 210 215 220  
 Thr Cys Ile Cys Lys Gly Asp Glu Cys Asp Gly Pro Asn Thr Met Asp  
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 Glu Glu Lys Leu Asp Ser Phe Asn Val Pro Ile Tyr Thr Ala Ser Val  
 260 265 270  
 Glu Glu Val Lys Cys Met Val Glu Glu Glu Gly Ser Phe Glu Ile Leu  
 275 280 285  
 Tyr Leu Gln Thr Phe Lys Leu Arg Tyr Asp Ala Gly Phe Ser Ile Asp  
 290 295 300  
 Asp Asp Cys Gln Val Arg Ser His Ser Pro Val Tyr Ser Asp Glu His  
 305 310 315 320  
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 325 330 335  
 Ile Leu Ala Ser His Phe Gly Glu Ala Ile Ile Pro Asp Ile Phe His  
 340 345 350  
 Arg Phe Ala Thr Asn Ala Ala Lys Val Ile Arg Leu Gly Lys Gly Phe  
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35 40 45
Pro Asn Ile Asn Lys Cys Ile Lys Val Ala Asp Leu Gly Cys Ala Ser
50 55 60
Gly Pro Asn Thr Leu Leu Thr Val Arg Asp Ile Val Gln Ser Ile Asp
65 70 75 80
Asp Val Arg Gln Glu Met Lys Asn Glu Leu Glu Arg Pro Thr Ile Gln
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Val Phe Leu Thr Asp Leu Phe Gln Asn Asp Phe Asn Ser Val Phe Met
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Gln Phe Leu Ser Gln Val Pro Ser Gly Leu Val Thr Glu Leu Gly Ile
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Thr Ala Asn Lys Arg Ser Ile Tyr Ser Ser Lys Ala Ser Pro Pro Pro
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 Asp Asp Cys Gln Val Arg Ser His Ser Pro Glu Tyr Ser Asp Glu His  
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 Ala Arg Ala Ala His Val Ala Ser Leu Leu Arg Ser Val Tyr Glu Pro  
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 Ile Leu Ala Asn His Phe Gly Glu Ala Ile Ile Pro Asp Ile Phe His  
 340 345 350  
 Arg Phe Ala Thr Asn Ala Ala Lys Val Ile Arg Leu Gly Lys Gly Phe  
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 Tyr Asn Asn Leu Ile Ile Ser Leu Ala Lys Lys Pro Glu Lys Ser Asp  
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 Ile  
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 <213> *Coffea arabica*

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&lt;212&gt; DNA

&lt;213&gt; Coffea arabica

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